Virginia Tech
VIRGINIA POLYTECHNIC INSTITUTE
AND STATE UNIVERSITY

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I am Vice President for Information Systems at Virginia Tech, the state's land grant university located in Blacksburg Virginia. With over 200 degree programs, we are the largest university in Virginia and the Commonwealth's leading research institution. Our research testbed project, The Blacksburg Electronic Village, is a working model for community network and information resource development which has received international acclaim and widespread media attention (http://www.bev.net). A member of Internet2 and the East Coast Gigapop Consortium, Virginia Tech and its partners are making great strides in linking communities with a statewide broadband network initiative known as NET.WORK.VIRGINIA which delivers affordable access to advanced, high bandwidth communications services for education and state government (http://www.networkvirginia.net).

I am writing on behalf of the university to strongly endorse Bell Atlantic's request for immediate regulatory relief to permit them to participate with the development of an advanced, multimedia, high bandwidth network for research and education.

Under the auspices of the Internet2 (I2) and East Coast Gigapop Consortium (ECGC) projects of the University Corporation for Advanced Internet Development (UCAID), development of such a network resource already has tremendous momentum. Internet2 is a collaborative project by over 100 U.S. research universities engaged in the development of a new family of advanced applications to meet emerging academic, requirements in research, teaching and learning. The East Coast Gigapop Consortium has strong membership from state based networks, such as NET.WORK.VIRGINIA and NYSERnet, interested in implementing a superset of Internet2 on a more focused, regional scale. A large portion of the ECGC region which stretches from Maine to Georgia, happens to overlay Bell Atlantic territory.

Virginia Tech, along with other members of both I2 and the ECGC, feels that healthy competition among all potential providers of the advanced network services is critical to the proper growth and development of community networks. The traditional IXC providers, especially MCI and Sprint, have a significant head start on potential competitors for these services. MCI currently is the sole provider for the National Science Foundation's vBNS network which currently serves as the backbone for Internet2. Sprint is the provider for DoE's ESnet network which also supports connectivity between a significant number of research and educational entities. To be viable, any competitor will need very significant resources in terms of expertise and capital.

It is the view of Virginia Tech that Bell Atlantic is among the prime candidates for providing advanced education and research network resources. The university has enjoyed highly productive partnerships with Bell Atlantic for development of our Blacksburg Electronic Village project and, most recently for our NET.WORK.VIRGINIA initiative described above. Both of these initiatives were conceived and developed by Virginia Tech relying heavily on partnerships with a number of communications players including Bell Atlantic. It is through these collaborative partnerships that we are becoming increasingly aware of the severe market constraints limiting the potentially explosive growth of advanced network services as commodity priced items.

We are confident in Bell Atlantic's expertise and respectful of their track record for engaging in meaningful efforts beneficial to education and to development of advanced network services. Therefore, we believe that all possible avenues should be explored in order to provide Bell Atlantic with the opportunity to compete fairly with Sprint, MCI, and others to provide services for Internet2, ECGC, and other research and education initiatives.

Telecommunications & Network Services
**West Virginia University**

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West Virginia University is the largest university in the state, with over 22,000 students. WVU is a Research I institution as classified by the Carnegie Foundation for the Advancement of Teaching.

WVU is on the cutting edge of research and development in the information technology field. Our "Concurrent Engineering Research Center" is a university/industry consortium formed by the U.S. Government to develop innovative computer technologies and information management methods to support virtual teams -- teams in which experts in different geographic locations nonetheless can work together in real time.

Today's Internet is not effective for most forms of real-time collaboration among researchers. There simply is not enough bandwidth to support real-time virtual concurrent engineering on many projects. The inadequacies of the current Internet are well known; Internet packets move slowly and often don't even make it to their destination because they are dropped. This slowness is particularly crippling for advanced university applications. If it takes a few seconds to download the Walt Disney company website, that's an annoyance; if it takes minutes or hours to send or receive large engineering projects and extensive graphics, the possibilities for collaboration and cooperation are much less.

WVU fully supports the Internet2 initiative among major universities to raise existing backbone speeds a hundred-fold. To achieve this goal quickly and economically, WVU believes strongly that all the best telecommunications companies -- including Bell Atlantic -- should be able to participate in its construction on the same regulatory terms and conditions as everyone else. More competition and more investment dollars will lower prices and bring us faster Internet speeds.

Bell Atlantic is a corporate partner in CERC, and also recently announced the construction of a $20 million dollar ATM network in West Virginia that will provide high-speed network access and advanced technology to government agencies, colleges and universities, schools and not-for-profit health care providers throughout the state. WVU has had a very good working relationship with Bell Atlantic over the years.

It is our understanding that Bell Atlantic will be excluded from providing interLATA access, the Internet2, and other interLATA broadband projects unless it receives regulatory relief. Furthermore, WVU understands that Bell Atlantic -- unlike any other provider of advanced telecommunications services, including cable, wireless and satellite companies -- will be subject to unbundling, resale and other rules that tend to deter advanced investment by taking away the incentive to invest. Whatever the justifications for the interLATA restriction or unbundling and resale rules generally, these rules retard investment and innovation in advanced services. We support Bell Atlantic's petition to remove the application of these rules to advanced Internet services.

Sincerely,

Tim Williams
Director, Telecommunications

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